

**HEARING AIDS AND METHODS AND APPARATUS
FOR AUDIO FITTING THEREOF**

Abstract of the Disclosure

5 A field ready, unsupervised-use ready, method and apparatus for audio fitting a
hearing aid is described in a hand held configuration having paired comparisons (hearing
selections) stored in and derivable from a memory therein. The paired comparisons are
presented one at a time to a user and a preferred selection for each paired comparison is
made by a select indicator after the user toggles back and forth between the selections for
10 as many times necessary in determining their preferences. A genetic algorithm converges
all the preferences upon a single solution. Crossover and mutation genetic algorithm
operators operate on a linear range of indexes representative of parametric values of the
pairs. A fully integrated hearing aid having all the above described features incorporated
therein is also presented.

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